



Chapter

**3**

# **SOCIOECONOMIC CHARACTERISTICS**

## **SOCIOECONOMIC CHARACTERISTICS**

*for the Airport Master Plan  
at Grand Canyon West Airport*

### **3.0 INTRODUCTION**

Examining the specific socioeconomic characteristics of the Grand Canyon West area, City of Peach Springs, City of Kingman, Mohave County, and northwestern Arizona will determine the ability of the surrounding area to support aviation activity and to influence further development of the Grand Canyon West Airport. These characteristics, such as economic growth and industrial activity, demographic patterns, and income, and tourism will all help in establishing the potential growth rate of the airport. In other words, by analyzing the information in this chapter, forecasts of aviation activity can be developed. Those forecasts will be provided in the following chapter.

### **3.1 LOCAL COMMUNITY PROFILE**

Peach Springs, Home of the Hualapai Indians was at one time a western terminal of the Santa Fe Railroad, with a roundhouse, shops, a Harvey Restaurant and a stage coach line. Abandoned buildings from days gone by line the streets along the highway into town. In town, some Hualapai tribal buildings can still be seen. A distinctive stone building is where Hualapai Wildlife and Outdoor Recreation Permits are available for sightseeing, hiking, camping, fishing, and hunting on the reservation. Near the intersection of Historic Route 66 and Diamond Creek Road is the Hualapai Tribal River Trip Office. Diamond Creek Road leads to the Colorado River in the beautiful west rim of the Grand Canyon. This is the only existing road leading to the bottom of the Grand Canyon.

Kingman is a regional trade, service and distribution center for northwestern Arizona. Its strategic location relative to Los Angeles, Las Vegas, Phoenix, Laughlin, and the Grand Canyon has made tourism, manufacturing/distribution, and transportation leading industries. Kingman is the county seat for Mohave County. Kingman's dry temperate climate and pollen free atmosphere add to its healthful attributes. The scenic

---

mountains around the Kingman area offer hiking, picnicking, camping, and other outdoor activities. The abundant freshwater shoreline in the surrounding area are a popular draw for fishing enthusiasts, and rafting on the Colorado River challenges the more adventurous. With a strong work force, a growing retirement community, and many families, Kingman is a growing vibrant city.

*Source: Arizona Department of Tourism and Kingman Chamber of Commerce*

## **3.2 HUALAPAI INDIAN TRIBE**

### **3.2.1 History**

The creation and the origin accounts of the Hualapai, or Walapai, Tribe are crucial to the Hualapai experience and culture. The Hualapai Tribe are descendants of the 14 bands of the Pai (people) from the original territories in the Northwest Quarter of Arizona. Each band had their own versions of the creation story, Wukahme (or Wukahmi), and the origin story, Madwida (or Merriwitica). Today, most of the Hualapai may recognize either Wukahme, Madwida, or both depending on which of the bands one descends from. The band associated with Grand Canyon West is the dinyikda Baja (Grass Spring Band) of the Ga' Odva Bay (Rim/Plateau People).

The Wukahme creation story took place on Spirit Mountain, Christmas Tree Pass, Nevada, east of the Colorado River. At the time of the Yuman Creation, Wukahme, only a peak, stood above flood water. Matavila, elder brother, and Judaba, younger brother, lived atop this vast peak. Matavila received a vision or a dream about creating people. They cut the reeds and followed the instructions and prayed to the creator (Breath giver). The people created included the Hualapai Tribe. Upon creation of the people, Matavila died.

Judaba took the people and several chiefs to live in Madwida, a beautiful cataract of the Grand Canyon. The people cultivated the land beneath the Wahavo, the sacred cave dwelling. They harvested the natural plants and survived on animals in the area.

The morals, values, and teachings they were given on Wukahme were strictly adhered to. One day, children were playing and throwing mudballs. A child was hit with a mudball, which had a stone hidden in it. The child started to cry, which caused his father to become angry and become involved in the altercation. More parents, relatives, and friends joined the altercation and chose sides, causing a fight to ensue. They resorted to using clubs during the growing fight and people were killed. To stop the fighting, Waqiyasma, the head chief, cursed the people, "It's as if this fighting is my fault; therefore everyone will speak in different languages and become different tribes." He then divided up the people and sent them out of the Madwida into different directions. This was the origin of the different Tribes and Nations of the world. The chosen people, the Hualapai, were allowed to remain in the area

---

surrounding the Madwida.

The first historical mention of the Pai was by Father Francisco Garces, in 1776, upon his encounter with them. This and following Spanish encounters had much effect on existing Pai, particularly with Pai trade and social intercourse with Western Pueblos. These Spanish encounters began to deteriorate Pai goods and trading among them. In 1826, hostilities began to rise between the Pai and non-Indians, particularly French-Canadian and Anglo-American trappers. This also caused the creation of slave raiders from New Mexico Territory. In 1842, military troops began to engage in military actions to preserve independence and integrity between the Indians and non-Indians.

The United States acquisitions of lands in the Southwest created increased exploration and colonization, allowing for more Indian - Anglo interaction. In 1851, Captain Lorenzon Sitgreaves encountered Pai northeast of Flagstaff and in the upper Truxton Canyon. This encounter stirred the Indians, and in one instance caused the attack of one of the guides by a member of the Cerbat Mountain Pai. This encounter was followed by Lt. E.F. Beale's expedition through Pai country, where bands were encountered in the Peach Springs area.

As a result of the exploration and colonization, the introduction of mining developments, military posts, and freighting roads became the turning point of the Anglo-Indian conflict. In 1866, the principal chief of the southern Pai bands was killed by a "typical race-prejudiced frontier type", initiating the Walapai War. Peace was re-established in 1869 after the Hualapais admitted defeat and sued for peace after Lt. Colonel William Redwood Price used scorched earth tactics in his lead of troops.

In 1871, the Pai began to learn that the United States Bureau of Indian Affairs considered itself the governing agency in charge of administering their transition from native life to subordinate cultural status. As part of their role, the Bureau of Indian Affairs set aside a one square mile radius reservation for them. In 1874, the United States Army forcibly moved the western band of Pai to La Paz, within the Colorado Jurisdiction, which became known to the Pairs as the "Long Walk" or "Trail of Tears". The eastern Pai bands, now called Havasupai, of the Pine Springs Band and some of the Peach Springs Canyon Band Pai waited out deportation in the Grand Canyon and its southern tributaries, such as Cataract Canyon, National Canyon, and Prospect Canyon. After suffering extensively in 1875, due to scarce rations, farming conditions not familiar with the Pai, and disease encounters and a large number of deaths, Pai bands fled back to the area they knew as their ancestral homelands.

After moving back to these lands, western Pai realized that to exist in their ancestral homeland, they must adopt the white man's ways. With this attitude and assistance in the negotiations from Schrum, principal chief at the time, reservations were set aside on the plateau of the Grand Canyon, with the Havasupai receiving 518 acres in 1882 and the Hualapai receiving 997,045

---

acres in 1883. Under the provisions of the Indian Reorganization Act of June 18, 1934, separate "tribal" governments were organized on the separate jurisdictions.

*Source: Grand Canyon West Resort Master Plan, June 1994*

### **3.2.2 Cultural Background**

The major occupation of the Hualapai Indians was that of food gathering and game hunting, with vegetal products being the primary source, due to the limited availability of game. The main food source was that of fruits, berries, and nuts which were gathered by the tribal women, and deer, antelope, mountain sheep, rabbits, and other game, which were hunted by men. Their practice of agriculture was contained exclusively near and around the Grand Canyon Tributaries.

The Hualapai Indians commonly referred to their dwellings as "Wicki-ups": a small, dome-shaped structure, constructed with small poles and branches covered by juniper bark or thatched, without any type of earth covering. Structures also part of the Hualapai culture include rock shelters, sweat houses, and rectangular, flat-roofed shade houses.

The Hualapai culture called for few ceremonies or dances, although they had great faith in shamanism - a belief that the Hualapai medicine man supposedly received their power through dreams. Through a combination of singing, the shaking of gourd rattles, application of herbs, and pretending to suck out disease through a tube, aided in their attempt to cure the sick.

The Hualapai Indian Reservation was and still is one of rugged and varied terrain between Peach Springs and the Colorado River west of the Grand Canyon National Park. It contains few tillable spots for crops due to the soil quality and content. The main use was that of stock-raising, while the sale of lumber products became a source of income. The Reservation is owned in undivided shares by enrolled Indians, and held in trust by the federal government. In 1947, the reservation was consolidated when the title of 500,000+ acres was put in trust, which had previously been held by the Santa Fe Railroad, increasing its acreage to 997,045.

The Hualapai Trading Company at Peach Springs was established in 1944 by the tribe. It was established as a "provider" for groceries and other merchandise, while allowing credit privileges. The cattle on the reservation are owned by members of the Hualapai Livestock Association, except the tribal herd.

The Hualapai Indian Tribe became organized as a tribe on December 17, 1938, when a constitution and by-laws was approved, which was later followed by the ratification of their corporate charter on June 6, 1943. Individuals listed on

---

the rolls as of 1938 are members, and children born to any member after January 1, 1938, who are of one-quarter degree or more of Indian blood, are also members.

The Tribal Council consists of nine members. Councilmen must be voters of 25 years of age and must be members of the tribe and residents of the reservation. All officers, committees and tribal employees are selected by the Council. Council officers include a Chairman, Vice-Chairperson, Secretary, Treasurer, Judge, and Police Chief, along with Tribal Assistant Administrator. The Council has jurisdiction over matters pertaining to management of tribal property, conduct of Indians and non-Indians on the reservation, tribal business enterprise, and the welfare of the tribal members. Limits of the Council's power are instances where the Secretary of the Interior must give approval.

*Source: Grand Canyon West Resort Master Plan, June 1994*

### **3.3 ECONOMY, EMPLOYMENT, AND INCOME**

Certain economic characteristics of a community help to identify the specific type of aviation activity common to the local area which distinguishes it from other airports. For example, one community's aviation activity may be comprised primarily of business travel by commercial and general aviation aircraft, one dependent upon air freight transport to and from manufacturing and resource industries, or still another may be defined by the local tourism market.

#### **3.3.1 Economy**

The Kingman area economy is supported to a large extent, over 30% of the work force, by manufacturing distribution and trade. A fully developed Airport Industrial Park, with reasonable land costs, has attracted over 50 companies, including Cotter & Company (True Value Hardware), Air Treads (a division of Goodyear), and American Woodmark Corp.

On the other hand, the Grand Canyon West area is solely supported by the tourist industry. The Hualapai Indian Nation has capitalized on the proximity of the Grand Canyon West area to the spectacular views of the Grand Canyon, the natural rugged terrain, direct road access to the Colorado River, their knowledge of the people and the lands, and their cultural history. Managed by the Hualapai Enterprise Board, a committee of business-minded Tribal members and non-members, the Hualapais have established a popular sightseeing tour operation along the west rim of the Canyon. The tour is narrated by Hualapai Indian guides, encompasses several miles of scenic vistas including Guano Point and Battleship Point, and features a savory barbecue meal served near the edge of the Canyon.

In addition to the tours, the Hualapai Nation attempted to generate additional revenue through gaming at the Grand Canyon West site. Approximately 50

---

slot machines were installed in the terminal building, which in turn provided employment for 25 tribal members. The slot machines achieved limited success. Initial profits funded the acquisition of a new generator. However, tourists were drawn more to the sightseeing tours than the slot machines. Expenses soon exceeded revenues and the machines were removed in October, 1995.

The success of the tour operation has steadily increased over the past six years. Table III-1 and Figure 3-1 depict the actual and projected visitor counts for years 1991-2000. In 1994 the cost of the tour was \$25.00 per person, which generated gross revenues of \$1,758,750 (not including gift shop and other sales). Currently, the cost of the tour is \$27.50 with anticipated 1996-1997 gross revenues of \$3,778,555. This fee is paid to the Hualapais by the companies that transport visitors to the site, and by those individuals arriving by car. Table III-2 and Figure 3-2 depict the actual and projected visitor counts for the Grand Canyon West area. Air traffic has, and is anticipated to account for 75.4% of total traffic to the Grand Canyon West area, and visitors in planes have and are anticipated to account for 62.6% of total visitors to the Grand Canyon West area.

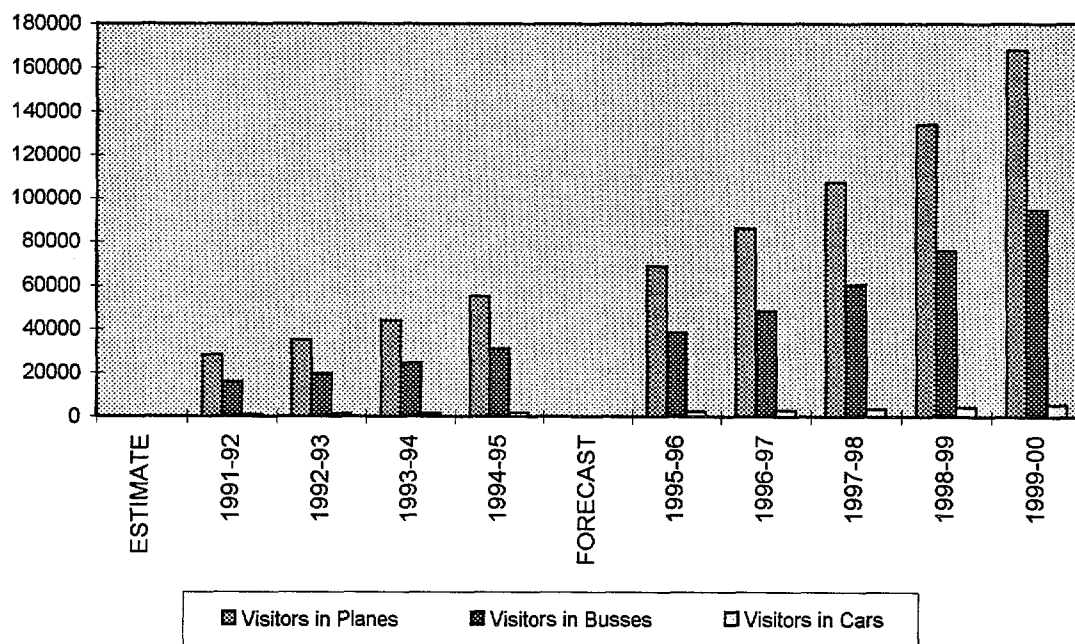
Multiple agencies provide air and ground service to the Grand Canyon West Site. They are listed in Table III-3. These agencies advertise primarily through travel agencies, tour companies, Chambers of Commerce, and the Yellow Pages.

**TABLE III-1  
GRAND CANYON WEST VISITOR COUNTS**

Year/ Period	Visitors in Planes	Visitors in Busses	Visitors in Cars	Total Visitors
<b>ESTIMATED</b>				
1991-92	28,200	15,900	900	45,000
1992-93	35,200	19,900	1,200	56,300
1993-94	44,100	24,800	1,500	70,400
1994-95	55,100	31,000	1,800	87,900
<b>FORECASTED</b>				
1995-96	68,800	38,800	2,300	109,900
1996-97	86,000	48,500	2,900	137,400
1997-98	107,600	60,600	3,600	171,800
1998-99	134,400	75,800	4,500	214,700
1999-00	168,000	94,700	5,600	268,400
<b>Total</b>	<b>727,400</b>	<b>410,000</b>	<b>24,300</b>	<b>1,161,800</b>

*Source: Grand Canyon West Resort Master Plan, June 1994  
Rounded to nearest hundred.*

**FIGURE 3-1  
GRAND CANYON WEST VISITOR COUNTS**



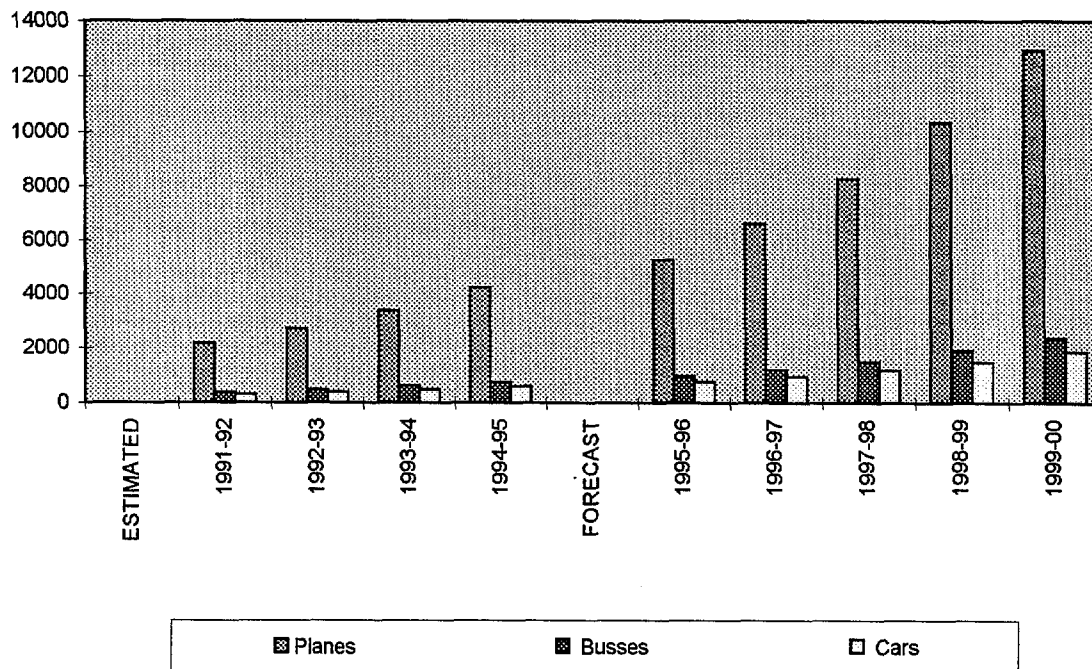


**TABLE III-2  
GRAND CANYON WEST TRANSPORTATION COUNTS**

Year/ Period	Planes	Busses	Cars
<b>ESTIMATED</b>			
1991-92	2,200	400	300
1992-93	2,700	500	400
1993-94	3,400	600	500
1994-95	4,200	800	600
<b>FORECASTED</b>			
1995-96	5,300	1,000	800
1996-97	6,600	1,200	1,000
1997-98	8,300	1,500	1,200
1998-99	10,300	1,900	1,500
1999-00	12,900	2,400	1,900
<b>Total</b>	<b>55,900</b>	<b>10,300</b>	<b>8,200</b>

*Source: Grand Canyon West Resort Master Plan, June 1994  
Rounded to nearest hundred.*

**FIGURE 3-2  
GRAND CANYON WEST TRANSPORTATION COUNTS**



**TABLE III-3**  
**AIR AND GROUND TRANSPORTATION SERVICE PROVIDERS TO**  
**GRAND CANYON WEST**

Air Service	Ground Service
Air Vegas <sup>1</sup>	Silverline Tours
Lake Mead Air	Desert Masters Adventures
Maverick Helicopters	Grand Canyon specialists
Scenic Air <sup>2</sup>	Interstate tours
Vision Air	K-T Tours
Air Nevada	

<sup>1</sup>Acquired Canyon Flyers and Adventure Airlines

<sup>2</sup>Discontinued service to GCW due to condition of runway

Concurrently with this Airport Master Plan the Hualapai Nation, along with Grand Canyon Enterprise, is studying the potential for the development of a resort operation at the Grand Canyon West Site. Included in this resort concept, is the phased development of a lodging facility, restaurant, interpretative/cultural center, expanded terminal building, employee housing, campgrounds, hiking trails, and the infrastructure to support the operations of the resort complex. Results of this study estimate 268,364 visitors per year by the year 2000, with 168,049 of those visitors arriving by aircraft.

### 3.3.2 Employment

Labor force data for the Kingman area, listed in Table III-4, indicates a history of steady growth in employment, and an unemployment rate near that of the 1993 state average of 6.2%. The majority of the employment is in the trade, service and government sectors, with the remainder distributed throughout manufacturing, construction, transportation, finance, and mining as outlined in Table III-5.

**TABLE III-4**  
**LABOR FORCE DATA FOR THE KINGMAN AREA**

Labor Force Data	1980	1990	1995
Labor Force	9,343	11,383	14,929
Employed	8,688	10,822	13,979
Unemployed	655	561	950
Unemployment Rate	7.0%	4.9%	6.4%

Source: Kingman Community Profile, June 1996

**TABLE III-5  
EMPLOYMENT BY CATEGORY  
KINGMAN AREA & MOHAVE COUNTY**

Employment Category	Kingman Area	Mohave County
Trade	30.0%	28.8%
Services	24.3%	24.4%
Government	17.0%	19.1%
Manufacturing	10.2%	10.0%
Construction	9.7%	8.5%
Transportation	4.6%	4.4%
Finance	4.0%	4.4%
Mining	0.3%	0.3%

*Source: Kingman Chamber of Commerce*

Employment data for the Hualapai Indian Nation was obtained from the Bureau of Indian Affairs. Table III-6 indicates the population and labor force changes that have occurred over the ten year period from 1984 to 1993. The tour operation at Grand Canyon West currently has eight permanent employees that live on site in trailer homes. The employment projection at the completion of Phase One of the resort development is 20 employees (one per two-bedroom housing unit), and 50 employees at the completion of Phase Two. The creation of these additional jobs would reduce the unemployment rate of the Hualapai Indian Nation to 74.2% and 70.1% upon the completion of Phase One and Two respectively.

### **3.3.3 Income**

Table III-7 lists income data comparisons for Mohave County and the State of Arizona. Per capita income levels for Mohave County realized the second largest increase in the state over the ten year period. Per capita income data for the Hualapai Nation was not available; however, in 1993 approximately two-thirds of the employed labor force earned over \$7,000 and approximately one-third of the employed labor force earned under \$7,000, as indicated in Table III-6.

**TABLE III-6  
LABOR FORCE DATA  
HUALAPAI INDIAN NATION**

	<b>Total 1993</b>	<b>Total 1988</b>	<b>Total 1984</b>	<b>'84-'93 Change Number</b>	<b>'84-'93 Change %</b>
Tribal Enrollment	1,888	1,600	1,337	551	41.2%
Labor Force	806	567	436	370	84.9%
Employed	188	147	124	64	51.6%
Earning \$7,000+	120	90	73	47	64.4%
Earning \$7,000-	68	57	51	17	33.3%
Unemployed	618	420	312	306	98.1%
Actively Seeking Work	160	120	283	- 123	-43.5%
Unemployment Rate	76.7%	76.7%	71.6%	---	---

*Source: U.S. Bureau of Indian Affairs, Report on Service Population and Labor Force, 1984, 1988, and 1993*

**TABLE III-7  
INCOME DATA COMPARISONS  
MOHAVE COUNTY & STATE OF ARIZONA**

	<b>1981 Per Capita Income</b>	<b>1991 Per Capita Income</b>	<b>Change %</b>
<b>Arizona</b>	\$9,819	\$12,733	29.7%
<b>Mohave County</b>	\$8,389	\$11,774	40.4%

*Source: 1995 Arizona State Aviation Needs Study*

### **3.4 POPULATION**

Population data for the Kingman area and Mohave County was obtained from the Arizona Department of Security (DES). Population in the City of Kingman, Kingman area, and Mohave County has steadily increased over the past several years. Mohave County's 116% increase from 1970-1980 was the highest in Arizona. In 1992, Mohave County had a 5.85% increase in population which was the highest in Arizona. Kingman's population grew 24.1% from 1990 to 1995. The DES population projections also indicate a continued increase in population for Kingman and Mohave County. Table III-8 depicts the historical and forecasted population information.

**TABLE III-8  
HISTORICAL AND FORECASTED POPULATION DATA  
CITY OF KINGMAN AND MOHAVE COUNTY**

Year	City of Kingman	Kingman Area	Mohave County
1970	7,312	13,387	25,857
1980	9,257	20,311	55,865
1985	10,428	22,500	72,600
1990	12,722	24,349	93,497
1995	16,769	32,482	126,350
FORECASTED			
2000	19,170	38,363	154,325
2005	21,772	43,908	177,981
2010	24,011	48,679	198,338

*Source: Arizona Department of Economic Security and Kingman Chamber of Commerce*

Population data for the Hualapai Indian Nation was obtained from the Bureau of Indian Affairs and is included in Table III-9. Population figures include only Native American members of the Hualapai Nation (except where "Other Indians" are noted), whereas the Labor Force Data in Table III-6 includes non-Indians (including Caucasians and other races) who are enrolled on the tribal employment records.

**TABLE III-9  
POPULATION HISTORY  
HUALAPAI INDIAN NATION**

Population	Total 1993	Total 1988	Total 1984	'84-'93 Change Number	'84-'93 Change %
Resident Population	1,800	1,300	1,083	717	66.2%
Within Reservation	1,500	1,100	946	554	58.6%
Adjacent to Reservation	300	200	137	163	119.0%
Other Indians on Reservation	0	51	41	-41	-100.0%

*Source: U.S. Bureau of Indian Affairs, Report on Service Population and Labor Force, 1984, 1988, and 1993*

---

### 3.5 SUMMARY

While the historical economic indicators for the Kingman area and Mohave County reflect some of the highest growth rates in the state of Arizona, the factors directly affecting the growth rate for the Grand Canyon West Airport are the demands by the tourist industry, and more so, the capability of the airport and resort complex infrastructure to support that demand. These factors will be considered in the computation of Aviation Demand Forecasts in Chapter 4.

Development of the Grand Canyon West area is bound to have a positive economic impact on the Hualapai Indian Tribe and the local economies of Peach Springs and Kingman through direct and indirect benefits, and an induced multiplier effect as new revenues are distributed throughout the community. Some of these benefits include the creation of construction jobs and permanent employment opportunities at the Grand Canyon West Airport and Resort, and income generated through the operations of airport facilities and services. The local economy is in turn being stimulated with increased revenues brought into the region by visitors from outside of the region, outside of the state, and even outside of the country. Approximately 50% of the visitors to Grand Canyon West in 1995 were from Oriental countries. With this world-wide exposure, and with the development of the appropriate infrastructure, Grand Canyon West is poised for continued growth.